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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,441	02/08/2001	Masahiko Maeda	Q63016	4617

7590 06/26/2003

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EXAMINER
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ZACHARIA, RAMSEY E

ART UNIT	PAPER NUMBER
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1773

DATE MAILED: 06/26/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

AS14

Office Action Summary

Application No.

09/762,441

Applicant(s)

MAEDA ET AL.

Examiner

Ramsey Zacharia

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5,7-9 and 11-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,7-9 and 11-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1773

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 18 June 2003 has been entered.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

3. Claims 1-5, 7-9, and 11-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Saitoh et al. (U.S. Patent 5,229,461) in view of Dessaint et al. (U.S. Patent 4,295,976).

Saitoh et al. teach a coating composition comprising a vinylidene fluoride copolymer which yields a film having excellent weatherability and stain resistance (column 1, lines 54-60). The copolymer comprises units that may be tetrafluoroethylene or chlorotrifluoroethylene (see formula II where X is fluorine or chlorine) and units having a hydroxyl functional group (formula III) (column 2, lines 17-47). The composition further comprises a curing agent, such as an isocyanate, an amino resin, or an acid anhydride, that is reactive with the hydroxyl groups in

Art Unit: 1773

the copolymer (column 9, lines 7-29). The coating may be applied directed to the substrate or over a primer coating, such as an acrylic coating (column 11, lines 1-11).

Regarding the stain resistance limitations in claims 1 and 2, the cracking resistance limitations in claims 3 and 4, and the hydroxyl value limitation of claim 9, these are taken to material properties of the coating composition. Since the coating composition of Saitoh et al. appears to be the same as that of the instant invention (especially since page 7, lines 17-19 of the instant specification cites the composition of JP-A-4-28707 as a suitable curable fluorine-containing resin and U.S. Patent 5,229,461 is an English language equivalent of JP-A-4-28707 as shown by Derwent abstract 1991-347997).

Regarding the limitations of claim 5, while Saitoh et al. is silent with respect to the weight of the coating, the coating weight of a protective coating is known to affect the degree of protection (e.g. stain resistance and weatherability). As such, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the weight of the coating, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2nd 272, 205 USPQ 215 (CCPA 1980).

Saitoh et al. do not teach applying the composition to leather, however, the composition is taught as being applied on substrates such as metal, wood, concrete, plastic, and the like (column 11, lines 5-8).

Dessaint et al. disclose that materials such as metals, plastics, wood materials, concrete, and leather are considered equivalent substrates for fluorinated anti-staining coatings (column 1, lines 5-11).

Art Unit: 1773

Dessaint et al. shows that for anti-staining fluorinated coatings metal, wood, concrete, plastic, and leather are equivalent structure substrates. Therefore, because these substrates were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute a leather substrate for the metal, wood, concrete, plastic, or the like material used as the substrate by Saitoh et al.

Therefore the invention of claims 1-5, 7-9, and 11-19 would have been obvious to one of ordinary skill in the art at the time the inventions were made.

#### ***Response to Arguments***

4. Applicant's arguments filed 18 June 2003 have been fully considered but they are not persuasive.

The applicants argue that Dessaint et al. teaches away from the use of a perfluorinated copolymer, and therefore teach away from the claimed invention requiring the copolymer to have either tetrafluoroethylene or chlorotrifluoroethylene.

This is not persuasive for the following reasons. First, Dessaint et al. is not relied upon to teach the structure of the fluorinated coating composition but rather to illustrate that that fluorinated anti-staining composition usable with metal, wood, concrete, or plastic are also usable with leather. Saitoh et al. is the primary reference and they explicitly teach the incorporation of tetrafluoroethylene or chlorotrifluoroethylene.

Second, chlorotrifluoroethylene is not a perfluorinated unit. Moreover, even with the incorporation tetrafluoroethylene (or chlorotrifluoroethylene) into the copolymer of Saitoh et al.,

Art Unit: 1773

the copolymer is not a perfluorinated copolymer since it comprises 50-90 mole% of vinylidene fluoride.

Finally, the invention as claimed is not directed to or limited to perfluorinated, or even perhalogenated, resins. The claimed fluorine-containing resin is required to have at least one of chlorotrifluoroethylene or tetrafluoroethylene units but the resin is still open to the inclusion of any other comonomers.

### *Conclusion*

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ramsey Zacharia whose telephone number is (703) 305-0503.

The examiner can normally be reached on Monday through Friday from 9 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau, can be reached on (703) 308-2367. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310 for non after-final correspondences and (703) 872-9311 for after-final correspondences.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Ramsey Zacharia

Primary Examiner

Technology Center 1700

6/25/03